

AMENDMENTS TO THE CLAIMS

Please amend the claims as indicated below. The language being added is underlined ("___") and the language being deleted contains either a strikethrough ("——") or is enclosed by double brackets ("[[]]").

1. (Currently Amended) An asynchronous digital subscriber line (ADSL) system comprising:

a central office (CO) operator configured to perform spectrum management, wherein the CO operator is further configured to provide a power spectral density (PSD) mask for spectral shaping of an ADSL overlap spectrum transmission over a plain old telephone system (POTS), wherein the PSD mask represented at least in part by a plurality of break points, the plurality of break points including is defined by the following break points: -97.5 \pm 10% decibel-milliwatts per hertz (dBm/Hz) at 0 \pm 10% kilohertz (kHz); -97.5 \pm 10% dBm/Hz at 4 \pm 10% kHz; -92.5 \pm 10% dBm/Hz at 4 \pm 10% kHz; -36.5 \pm 10% dBm/Hz at 25 \pm 10% kHz; -36.5 \pm 10% dBm/Hz at 1104 \pm 10% kHz; -46.5 \pm 10% dBm/Hz at 2208 \pm 10% kHz; -101.5 \pm 10% dBm/Hz at 3925 \pm 10% kHz; -101.5 \pm 10% dBm/Hz at 8500 \pm 10% kHz; -103.5 \pm 10% dBm/Hz at 8500 \pm 10% kHz; and -103.5 \pm 10% dBm/Hz at 11040 \pm 10% kHz.

2. (Currently Amended) An asynchronous digital subscriber line (ADSL) system comprising:

a central office (CO) operator configured to perform spectrum management, wherein the CO operator is further configured to provide a power spectral density (PSD) mask for spectral shaping of an ADSL overlap spectrum transmission over a plain old telephone system (POTS), wherein the PSD mask represented at least in part by a plurality of break points, the plurality of break points including is defined by the following break points: $-97.5 \pm 10\%$ decibel-milliwatts per hertz (dBm/Hz) at $0 \pm 10\%$ kilohertz (kHz); $-97.5 \pm 10\%$ dBm/Hz at $4 \pm 10\%$ kHz; $-72.5 \pm 10\%$ dBm/Hz at $80 \pm 10\%$ kHz; $-36.5 \pm 10\%$ dBm/Hz at $138 \pm 10\%$ kHz; $-36.5 \pm 10\%$ dBm/Hz at $1104 \pm 10\%$ kHz; $-46.5 \pm 10\%$ dBm/Hz at $2208 \pm 10\%$ kHz; $-101.5 \pm 10\%$ dBm/Hz at $3925 \pm 10\%$ kHz; $-101.5 \pm 10\%$ dBm/Hz at $8500 \pm 10\%$ kHz; $-103.5 \pm 10\%$ dBm/Hz at $8500 \pm 10\%$ kHz; and $-103.5 \pm 10\%$ dBm/Hz at $11040 \pm 10\%$ kHz.

3. (Currently Amended) An asynchronous digital subscriber line (ADSL) system comprising:

a central office (CO) operator configured to perform spectrum management, wherein the CO operator is further configured to provide a power spectral density (PSD) mask for spectral shaping of an ADSL overlap spectrum transmission over a plain old telephone system (POTS), wherein the PSD mask represented at least in part by a plurality of break points, the plurality of break points including is defined by the following break points: $-97.5 \pm 10\%$ decibel-milliwatts per hertz (dBm/Hz) at $0 \pm 10\%$ kilohertz (kHz); $-97.5 \pm 10\%$ dBm/Hz at $4 \pm 10\%$ kHz; $-92.5 \pm 10\%$ dBm/Hz at $4 \pm 10\%$ kHz; -56.5

$\pm 10\%$ dBm/Hz at $25 \pm 10\%$ kHz; $-56.5 \pm 10\%$ dBm/Hz at $1104 \pm 10\%$ kHz; $-46.5 \pm 10\%$ dBm/Hz at $2208 \pm 10\%$ kHz; $-101.5 \pm 10\%$ dBm/Hz at $3925 \pm 10\%$ kHz; $-101.5 \pm 10\%$ dBm/Hz at $8500 \pm 10\%$ kHz; $-103.5 \pm 10\%$ dBm/Hz at $8500 \pm 10\%$ kHz; and $-103.5 \pm 10\%$ dBm/Hz at $11040 \pm 10\%$ kHz.

4. (Currently Amended) An asynchronous digital subscriber line (ADSL) system comprising:

a central office (CO) operator configured to perform spectrum management, wherein the CO operator is further configured to provide a power spectral density (PSD) mask for spectral shaping of an ADSL overlap spectrum transmission over a plain old telephone system (POTS), wherein the PSD mask represented at least in part by a plurality of break points, the plurality of break points including is defined by the following break points: $-97.5 \pm 10\%$ decibel-milliwatts per hertz (dBm/Hz) at $0 \pm 10\%$ kilohertz (kHz); $-97.5 \pm 10\%$ dBm/Hz at $4 \pm 10\%$ kHz; $-92.5 \pm 10\%$ dBm/Hz at 80 kHz; $-56.5 \pm 10\%$ dBm/Hz at $138 \pm 10\%$ kHz; $-56.5 \pm 10\%$ dBm/Hz at $1104 \pm 10\%$ kHz; $-46.5 \pm 10\%$ dBm/Hz at $2208 \pm 10\%$ kHz; $-101.5 \pm 10\%$ dBm/Hz at $3925 \pm 10\%$ kHz; $-101.5 \pm 10\%$ dBm/Hz at $8500 \pm 10\%$ kHz; $-103.5 \pm 10\%$ dBm/Hz at $8500 \pm 10\%$ kHz; and $-103.5 \pm 10\%$ dBm/Hz at $11040 \pm 10\%$ kHz.

5. (Currently Amended) An asynchronous digital subscriber line (ADSL) system comprising:

a central office (CO) operator configured to perform spectrum management, wherein the CO operator is further configured to provide a power spectral density (PSD) mask for spectral shaping of an ADSL overlap spectrum over an integrated digital services network (ISDN), wherein the PSD mask represented at least in part by a plurality of break points, the plurality of break points including is defined by the following break points: $-90 \pm 10\%$ decibel-milliwatts per hertz (dBm/Hz) at $0 \pm 10\%$ kilohertz (kHz); $-90 \pm 10\%$ dBm/Hz at $93.1 \pm 10\%$ kHz; $-62 \pm 10\%$ dBm/Hz at $209 \pm 10\%$ kHz; $-36.5 \pm 10\%$ dBm/Hz at $255 \pm 10\%$ kHz; $-36.5 \pm 10\%$ dBm/Hz at $1104 \pm 10\%$ kHz; $-46.5 \pm 10\%$ dBm/Hz at $2208 \pm 10\%$ kHz; $-101.5 \pm 10\%$ dBm/Hz at $3925 \pm 10\%$ kHz; $-101.5 \pm 10\%$ dBm/Hz at $8500 \pm 10\%$ kHz; $-103.5 \pm 10\%$ dBm/Hz at $8500 \pm 10\%$ kHz; and $-103.5 \pm 10\%$ dBm/Hz at $11040 \pm 10\%$ kHz.

6. (Currently Amended) An asynchronous digital subscriber line (ADSL) system comprising:

a central office (CO) operator configured to perform spectrum management, wherein the CO operator is further configured to provide a power spectral density (PSD) mask for spectral shaping of an ADSL overlap spectrum over an integrated digital services network (ISDN), wherein the PSD mask represented at least in part by a plurality of break points, the plurality of break points including is defined by the following break points: $-90 \pm 10\%$ decibel-milliwatts per hertz (dBm/Hz) at $0 \pm 10\%$ kilohertz (kHz); $-90 \pm 10\%$ dBm/Hz at $93.1 \pm 10\%$ kHz; $-62 \pm 10\%$ dBm/Hz at $209 \pm 10\%$ kHz; -56.5

$\pm 10\%$ dBm/Hz at $255 \pm 10\%$ kHz; $-56.5 \pm 10\%$ dBm/Hz at $1104 \pm 10\%$ kHz; $-46.5 \pm 10\%$ dBm/Hz at $2208 \pm 10\%$ kHz; $-101.5 \pm 10\%$ dBm/Hz at $3925 \pm 10\%$ kHz; $-101.5 \pm 10\%$ dBm/Hz at $8500 \pm 10\%$ kHz; $-103.5 \pm 10\%$ dBm/Hz at $8500 \pm 10\%$ kHz; and $-103.5 \pm 10\%$ dBm/Hz at $11040 \pm 10\%$ kHz.

7. (Currently Amended) An asynchronous digital subscriber line (ADSL) system comprising:

a central office (CO) operator configured to perform spectrum management, wherein the CO operator is further configured to provide a power spectral density (PSD) mask for spectral shaping of an ADSL overlap spectrum transmission over a plain old telephone system (POTS), ~~wherein the PSD mask represented at least in part by a plurality of break points, the plurality of break points including~~ is defined by the following break points: $-97.5 \pm 5\%$ decibel-milliwatts per hertz (dBm/Hz) at $0 \pm 5\%$ kilohertz (kHz); $-97.5 \pm 5\%$ dBm/Hz at $4 \pm 5\%$ kHz; $-92.5 \pm 5\%$ dBm/Hz at $4 \pm 5\%$ kHz; $-36.5 \pm 5\%$ dBm/Hz at $25 \pm 5\%$ kHz; $-36.5 \pm 5\%$ dBm/Hz at $1104 \pm 5\%$ kHz; $-46.5 \pm 5\%$ dBm/Hz at $2208 \pm 5\%$ kHz; $-101.5 \pm 5\%$ dBm/Hz at $3925 \pm 5\%$ kHz; $-101.5 \pm 5\%$ dBm/Hz at $8500 \pm 5\%$ kHz; $-103.5 \pm 5\%$ dBm/Hz at $8500 \pm 5\%$ kHz; and $-103.5 \pm 5\%$ dBm/Hz at $11040 \pm 5\%$ kHz.

8. (Currently Amended) An asynchronous digital subscriber line (ADSL) system comprising:

a central office (CO) operator configured to perform spectrum management, wherein the CO operator is further configured to provide a power spectral density (PSD) mask for spectral shaping of an ADSL non-overlap spectrum over a plain old telephone system (POTS), wherein the PSD mask represented at least in part by a plurality of break points, the plurality of break points including is defined by the following break points: $-97.5 \pm 5\%$ decibel-milliwatts per hertz (dBm/Hz) at $0 \pm 5\%$ kilohertz (kHz); $-97.5 \pm 5\%$ dBm/Hz at $4 \pm 5\%$ kHz; $-72.5 \pm 5\%$ dBm/Hz at $80 \pm 5\%$ kHz; $-36.5 \pm 5\%$ dBm/Hz at $138 \pm 5\%$ kHz; $-36.5 \pm 5\%$ dBm/Hz at $1104 \pm 5\%$ kHz; $-46.5 \pm 5\%$ dBm/Hz at $2208 \pm 5\%$ kHz; $-101.5 \pm 5\%$ dBm/Hz at $3925 \pm 5\%$ kHz; $-101.5 \pm 5\%$ dBm/Hz at $8500 \pm 5\%$ kHz; $-103.5 \pm 5\%$ dBm/Hz at $8500 \pm 5\%$ kHz; and $-103.5 \pm 5\%$ dBm/Hz at $11040 \pm 5\%$ kHz.

9. (Currently Amended) An asynchronous digital subscriber line (ADSL) system comprising:

a central office (CO) operator configured to perform spectrum management, wherein the CO operator is further configured to provide a power spectral density (PSD) mask for spectral shaping of an ADSL overlap spectrum over a plain old telephone system (POTS), wherein the PSD mask represented at least in part by a plurality of break points, the plurality of break points including is defined by the following break points: $-97.5 \pm 5\%$ decibel-milliwatts per hertz (dBm/Hz) at $0 \pm 5\%$ kilohertz (kHz); $-97.5 \pm 5\%$ dBm/Hz at $4 \pm 5\%$ kHz; $-92.5 \pm 5\%$ dBm/Hz at $4 \pm 5\%$ kHz;

-56.5 \pm 5% dBm/Hz at 25 \pm 5% kHz; -56.5 \pm 5% dBm/Hz at 1104 \pm 5% kHz; -46.5 \pm 5% dBm/Hz at 2208 \pm 5% kHz; -101.5 \pm 5% dBm/Hz at 3925 \pm 5% kHz; -101.5 \pm 5% dBm/Hz at 8500 \pm 5% kHz; -103.5 \pm 5% dBm/Hz at 8500 \pm 5% kHz; and -103.5 \pm 5% dBm/Hz at 11040 \pm 5% kHz.

10. (Currently Amended) An asynchronous digital subscriber line (ADSL) system comprising:

a central office (CO) operator configured to perform spectrum management, wherein the CO operator is further configured to provide a power spectral density (PSD) mask for spectral shaping of an ADSL non-overlap spectrum over a plain old telephone system (POTS), ~~wherein the PSD mask represented at least in part by a plurality of break points, the plurality of break points including~~ is defined by the following break points: -97.5 \pm 5% decibel-milliwatts per hertz (dBm/Hz) at 0 \pm 5% kilohertz (kHz); -97.5 \pm 5% dBm/Hz at 4 \pm 5% kHz; -92.5 \pm 5% dBm/Hz at 80 \pm 5% kHz; -56.5 \pm 5% dBm/Hz at 138 \pm 5% kHz; -56.5 \pm 5% dBm/Hz at 1104 \pm 5% kHz; -46.5 \pm 5% dBm/Hz at 2208 \pm 5% kHz; -101.5 \pm 5% dBm/Hz at 3925 \pm 5% kHz; -101.5 \pm 5% dBm/Hz at 8500 \pm 5% kHz; -103.5 \pm 5% dBm/Hz at 8500 \pm 5% kHz; and -103.5 \pm 5% dBm/Hz at 11040 \pm 5% kHz.

11. (Currently Amended) An asynchronous digital subscriber line (ADSL) system comprising:

a central office (CO) operator configured to perform spectrum management, wherein the CO operator is further configured to provide a power spectral density (PSD) mask for spectral shaping of an ADSL overlap spectrum over an integrated digital services network (ISDN), ~~wherein the PSD mask represented at least in part by a plurality of break points, the plurality of break points including~~ is defined by the following break points: $-90 \pm 5\%$ decibel-milliwatts per hertz (dBm/Hz) at $0 \pm 5\%$ kilohertz (kHz); $-90 \pm 5\%$ dBm/Hz at $93.1 \pm 5\%$, kHz; $-62 \pm 5\%$ dBm/Hz at $209 \pm 5\%$ kHz; $-36.5 \pm 5\%$ dBm/Hz at $255 \pm 5\%$ kHz; $-36.5 \pm 5\%$ dBm/Hz at $1104 \pm 5\%$ kHz; $-46.5 \pm 5\%$ dBm/Hz at $2208 \pm 5\%$ kHz; $-101.5 \pm 5\%$ dBm/Hz at $3925 \pm 5\%$ kHz; $-101.5 \pm 5\%$ dBm/Hz at $8500 \pm 5\%$ kHz; $-103.5 \pm 5\%$ dBm/Hz at $8500 \pm 5\%$ kHz; and $-103.5 \pm 5\%$ dBm/Hz at $11040 \pm 5\%$ kHz.

12. (Currently Amended) An asynchronous digital subscriber line (ADSL) system comprising:

a central office (CO) operator configured to perform spectrum management, wherein the CO operator is further configured to provide a power spectral density (PSD) mask for spectral shaping of an ADSL overlap spectrum over an integrated digital services network (ISDN), ~~wherein the PSD mask represented at least in part by a plurality of break points, the plurality of break points including~~ is defined by the following break points

: $-90 \pm 5\%$ decibel-milliwatts per hertz (dBm/Hz) at $0 \pm 5\%$ kilohertz (kHz); $-90 \pm$

5% dBm/Hz at $93.1 \pm 5\%$ kHz; $-62 \pm 5\%$ dBm/Hz at $209 \pm 5\%$ kHz; $-56.5 \pm 5\%$ dBm/Hz at $255 \pm 5\%$ kHz; $-56.5 \pm 5\%$ dBm/Hz at $1104 \pm 5\%$ kHz; $-46.5 \pm 5\%$ dBm/Hz at $2208 \pm 5\%$ kHz; $-101.5 \pm 5\%$ dBm/Hz at $3925 \pm 5\%$ kHz; $-101.5 \pm 5\%$ dBm/Hz at $8500 \pm 5\%$ kHz; $-103.5 \pm 5\%$ dBm/Hz at $8500 \pm 5\%$ kHz; and $-103.5 \pm 5\%$ dBm/Hz at $11040 \pm 5\%$ kHz.